



John C. Stennis Space Center Stennis Space Center, MS 39529-6000

John C. Stennis Space Center Hazardous Material, Hazardous Waste, And Solid Waste Plan

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Approval/Concurrence

Original signed by:	
David Lorance	6/13/2018
David Lorance,	Date
NASA Environmental Officer	

Document History Log

Revision/ Change	Date	Originator/ Phone	Description
Basic	12/18/2001	RA02/J. Gordon, Ext. 8-7384	Initial Release and supersedes SPG 4130.2
A	11/12/2003	Michael De Sandro Ext. 8-2413	Major edits, rewrites, reorganization, restructuring throughout for redundancy; grammar; references; continuity; names of organizations, roadways and facilities; and to clarify processes/requirements, especially for training, MSDS, SAA management. 5.0 (Cancellation) deleted, replaced with new title (Document and Records Control) and text; 6.0 (Training) add new to clarify responsibilities for training acquisition, provision and records; 7.0 add SAA Manager/alternate refresher training; 7.3 add new for Industrial Hygiene responsibility; 9.4 add ref to forms SSC-696J and SSC-696N (sample forms deleted per refs to SSC Forms Index in Section 5.0 and throughout SCWI); 10.0 insert Table 1 from superseded SPG 4130.2 (omitted in error at initial release of this SCWI), with delete of "Burner Blender" from NASA entry; 10.1.1 add notification requirement for change of SAA Manager or his/her alternate; Appendix A change SAA placard requirements.

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В	01/10/2007	Michael De Sandro Ext. 8-2413	3.0, 6.0, 9.5: change 29 CFR 1910.120 to .1200; 3.0: CFR refs added or changed per corrections in the text of Sections 8.1, 8.2 and 8.4; 4.0 and 6.0: add refs to SPR 8715.1 and NPD 1441.1; 7.5, 10.3.1, 11.1.1: SSC-696F waste removal process -delete generator signature and copy retention, revise pick-up/storage verification and return copy process; 9.5 delete MSDS binder requirement; 10.1.2 (a): add ref to DOT Level I containers * 10.3.1: revised by insert of rewritten text in 11.1.1 11.0 revised header title and list of UW items ^ 11.1.1: text rewritten and moved to 10.3.1; 12.2 add pallets to list; Appendix A: add section numbers to main headers and modify A.6 by adding ref to Section 10.3.1 * CA for CAR E-0406-HWM-0039 ^ CA for CAR E-0406-HWM-0055
С	01/21/2009	Halela Nguyen Ext. 8-3978	Throughout: Various edits and changes, as follows: 90-day site to Building 2210; Affirmative Procurement to Sustainable Acquisition, Onsite contractors to NASA Contractors; Executive Order (EO) 13101 to EO 13423 4.0: add SPR 1440.1 and SMRI-1440-6198; reorder 5.0: add ref to SATERN 6.0: change UW training annually to every 3 years; add 'Formal' retraining to subs -b, -c, -d and -e 7.1-f: merge with -c, renumber g thru j 7.2-i: change ref from Sec 10.0 Table 1 to Sec 6.0 7.3-g: add B2210 7.5: change Materials Procurement Personnel to Hazardous Materials Users/Requestors 10.0 Table 1: change NOAA National Data Buoy EPA I.D. No. to MS2130500000; 10.1 Title: add 'or Potentially Hazardous Waste' 10.1.1: add ref to Section 10.3.1; change 'recurrent' to 'recurring' (continued on next page →)

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C continued	01/21/2009	Halela Nguyen Ext. 8-3978	10.1.2: relocate phrase '(connected to sink/shower)' and change SSC-696J retention time from 3 years to 5* 10.3.2: change 'Universal Waste' to 'potentially hazardous waste' and insert text from 11.1.2 11.0: change 43 CFR to 40 CFR; revise Examples list 11.1 and subsections: delete all titles and merge 11.1.1 text with 11.0 (with insert of ref to 10.3.2) and merge 11.1.2 text with 10.3.2 12.1: change Class A Permit No to SW02401B0376; change Landfill Log form Number to FSD-FM-020; add recyclable materials to list of waste prohibited from landfill; 12.2: add Trees, Limbs, Stumps, Leaves, for disposal of Class A Rubbish Site; add Unpainted /Untreated wood debris (Pallets, cable spools, scraps lumber) 12.2-h: change to Appliances 12.2-i: change to Recyclable Materials (Section 12.3) 12.2-j: change to Tires Appendix A: update contact list - change Kristi Hurt to Halela Nguyen A.2: revise and add text to clarify requirements for container labeling Appendix B: update acronyms list * Corrective Action for CAR E-0808-FOSC-008
D	2/18/2013	Halela Nguyen Ext. 8-3978	4.0: delete <i>SMRI-1440-6198</i> 6.0: add line f 6.0-b: change course numbers for RCRA/UWM to QG-704-COM-NAS, and for DOT to QG-604-COM 6.0-e: change <i>minimum of annually</i> to <i>every 3 years</i> 7.3-g: delete <i>within three days</i> ; add <i>refer to Section 10.3.1</i> 9.2 intro paragraph: delete <i>quarterly</i> from <i>quarterly review</i> ; add ref to <i>HMIS</i> 9.2-e: change <i>Claim Assistance</i> to <i>Chemical Abstracts</i> 9.2-k: change <i>next calendar</i> to <i>reporting</i> 10.0: add SBT-22 and Rolls Royce. 10.3.1: change <i>SMRI-1440-6198</i> to <i>SPR 1440.1</i> and revise to clarify pickup time and signature process. Table 1: Add Pratt Whitney Rocketdyne

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E	4/15/2016	Halela Nguyen Ext. 8-3978	Table of Contents: Replace Executive Order (EO) 13423 and 13514 with 13693. Change Facility Operating Services Contractor (FOSC) to Stennis Operating Contractor (SOC). Change TCRS to SATERN. 7.2-a: Revise and add text to clarify requirements. 9.2: Add reference to reflect changes in 7.2-a. 10.0: Added Aerojet Rocketdyne. 10.3.1: Revise and add text to clarify SAA requirements. Appendix B: Updated Acronyms.
F	5/14/2018	Halela Nguyen Ext. 8-3978	Throughout: change Accumulation Point (AP) to Centralized Accumulation Area (CAA), update regulations to the Hazardous Waste Generator Improvement Rule. Authority: Update United States Codes. Table of Contents: update titles and page numbers. 6.0: Revised training course number for DOT training, revise training requirement for SAA and UW training from every 3 years to annually, revise training requirement for Equipment Operators. 7.3: Included training requirements for hazardous materials handlers. 10.0: Changed "Conditionally Exempt" to "Very Small Quantity Generator (VSQG)". 10.0 Table 1: update NAVSCIATTS EPA ID number and generator status, added GPO to list of generators. 10.3: Removed disposal time limit for waste under 55 gallons. 12.1 and 12.2: Updated rule and add text "Mississippi Department of Environmental Quality". Appendix A: Updated rule, changed "working days to calendar days", revised contact information. Appendix B: Updated Acronyms.

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1.0 PURPOSE

This Plan is a guide to the proper handling and disposal of hazardous material, hazardous waste, universal waste and non-hazardous solid waste at the National Aeronautics and Space Administration (NASA) John C. Stennis Space Center (SSC). It is designed to provide NASA, resident agencies, and contractors with consistent procedures for handling and disposal of these materials, to help them comply with regulatory requirements, and to assist them in reaching minimization goals by reducing or eliminating the volume of waste they generate.

This Plan identifies and standardizes best management practices for effective management of hazardous material, hazardous waste, and non-hazardous waste throughout their life cycle (including purchase and inventory, storage, segregation, accumulation, handling and disposal), and for effective minimization of these materials through on-going programs such as substitution, reduction, process improvement, redistribution, and recycling.

2.0 APPLICABILITY

This Plan applies to all organizations, resident agencies, contractors, and individuals who operate at SSC. In the event a requirement has a significant operational impact, the user should request an audit evaluation from NASA Environmental Management (EM) to determine a reasonable alternative action for incorporation into this Plan.

A complete listing of the environmental laws and regulations applicable to SSC is provided in this Plan for reference. Organizations should be familiar with these regulations. Copies are available upon request from NASA EM. Information required to implement this Plan may be obtained from NASA EM or the Stennis Operating Contractor (SOC), Environmental Services (ES). Required SSC forms may be obtained per Section 5.0.

3.0 **AUTHORITY**

United States Codes (USC):

- 33 USC 1251, Clean Water Act
- 33 USC 1401, Marine Protection, Research, Sanctuaries Act 1972 as amended (16 USC 1431)
- 41 USC 9601, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by Superfund Amendments Re-authorization Act (SARA)
- 42 USC 300f, Safe Drinking Water Act
- 42 USC 4321, National Environmental Policy Act
- 42 USC 6901, Resource Conservation and Recovery Act

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Code of Federal Regulations (CFR):

- 14 CFR 1216, NASA Environmental Quality
- 29 CFR 1910.1200, Occupational Safety and Health Standards (OSHA) Hazard Communication
- 40 CFR 110, Discharge of Oil
- 40 CFR 112, Oil Pollution Prevention
- 40 CFR 114, Civil Penalties for Violation of Oil
- 40 CFR 116, Designation of Hazardous Substances
- 40 CFR 117, Determination of Reportable Quantities for Hazardous Substances
- 40 CFR 258, Criteria for Municipal Solid Waste Landfills
- 40 CFR 260, Hazardous Waste Management System: General
- 40 CFR 261, Identification and Listing of Hazardous Waste
- 40 CFR 262, Standards Applicable to Generators of Hazardous Waste
- 40 CFR 263, Standards Applicable to Transportation of Hazardous Waste
- 40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
- 40 CFR 266, Standards for Management of Specific Hazardous Wastes and Specific Types of Waste Management Facilities
- 40 CFR 267, Standards for Owner and Operators of Hazardous Waste Facilities Operating Under a Standardized Permit
- 40 CFR 268, Land Disposal Restrictions (LDR)
- 40 CFR 273, Standards for Universal Waste Management
- 40 CFR 279, Standards for Management of Used Oil
- 40 CFR 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)
- 40 CFR 302, Designation Reportable Quantities, and Notification
- 40 CFR 350-374, Emergency Planning and Community Right-To-Know Act (EPCRA) / Emergency Planning and Notification
- 40 CFR 372, Toxic Chemical Release Reporting
- 40 CFR 761, Polychlorinated Biphenyl (PCB) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
- 40 CFR 763, Asbestos
- 49 CFR 171-195, Department of Transportation, Hazardous Material Regulations

Executive Orders (EO):

- 12088, Federal Compliance with Pollution Control Standards
- 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements
- 13834, Efficient Federal Operations

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4.0 REFERENCES

In addition to authority documents listed in Section 3.0, the following are referenced in this Plan. Referenced documents shall be the latest version unless otherwise specified.

NPR 1441.1, NASA Records Management Program

SPR 1400.1, Document Preparation, Numbering and Management

SPR 1440.1, SSC Records Management Program Requirements

SPR 8500.2, Environmental Operations and Implementation Program Procedural Requirements

SPR 8715.1, SSC Safety and Health Program Requirements

SCWI-1800-0003, SSC Bloodborne Pathogens Control Program

SCWI-1800-0005, SSC Hazard Communication Program Plan

SCWI-8500-0003-ENV, Sustainable Acquisitions Plan

SCWI-8500-0017-ENV, Pollution Prevention Plan

SCWI-8500-0020-ENV, Environmental Integrated Contingency Plan with Spill Prevention Control and Countermeasures (SPCC) Plan

Mississippi Administrative Code, Title 11, Part 4, Mississippi Nonhazardous Solid Waste Management Regulations

5.0 DOCUMENT AND RECORDS CONTROL

This Stennis Common Work Instruction (SCWI) shall be maintained in accordance with SPR 1400.1, *Document Preparation, Numbering and Management* guidelines. Records and forms required by this SCWI shall be maintained in accordance with NPR 1441.1, *NASA Records Management Program*, and SPR 1440.1, *SSC Records Management Program Requirements*. Forms shall be the latest version and may be obtained from the SSC Electronic Forms Index or from the SSC Forms Office. NASA and NASA Contractor training records shall be maintained in the SSC Certification Tracking Database (CerTrak), the System for Administration, Training and Educational Resources for NASA (SATERN), or in accordance with the employer's system.

6.0 TRAINING

NASA, resident agencies, and contractor organizations shall ensure that applicable training is provided for their employees who handle or manage hazardous materials, hazardous waste, or universal waste. If requested, SOC/ES will provide training for the aforementioned areas. Records of training shall be maintained per Section 5.0. Minimum training requirements are as follows. Refer to Sections 9.5 and 11.0 for additional training information.

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- a. Persons who may be exposed to hazardous material shall be trained in the Hazard Communication Standard (29 CFR 1910.1200). Informal retraining is required when the chemical hazards or process changes. Formal retraining is required every three (3) years.
- b. Persons who manage the SSC Hazardous Waste Central Accumulation Area (CAA) in B2210 shall be trained in the Resource Conservation and Recovery Act (RCRA) Standard (40 CFR 265.17), the Universal Waste Management (UWM) Standard (40 CFR 273), and the Department of Transportation (DOT) Standard (49 CFR 171-195). Formal retraining is required annually for RCRA and UWM, and every three (3) years for DOT.
- c. Persons who sign manifests for disposal of hazardous waste shall be trained in the DOT Standard (49 CFR 171-195). Formal retraining is required every three (3) years.
- d. Hazardous Waste Satellite Accumulation Area (SAA) managers and their alternates (Section 11.1.1) shall be trained, at a minimum, in the applicable regulations of 40 CFR 262.15 and 40 CFR 265.171-174. Formal retraining is required annually.
- e. Persons who handle Universal Waste shall be trained per the UWM Standard (40 CFR 273). Formal retraining is required annually.
- f. Persons who load and unload hazardous waste shall be trained per the DOT Standard 49 CFR 172. Formal retraining is required annually.

7.0 RESPONSIBILITIES

All SSC organizations are responsible for ensuring that personnel involved in the procurement, handling, transport, clean-up, recycling, generation, and/or disposal of hazardous materials, hazardous wastes, or solid wastes are familiar with this Plan and have adequate training per Section 6.0. Certain individuals will have additional specific responsibilities as detailed below. Anyone with questions regarding their responsibilities should contact SOC/ES.

7.1 NASA Environmental Management

NASA Environmental Management (EM) shall:

- a. Be responsible for developing and updating this document and the procedures herein as required when the regulations change or new regulations are added;
- b. Provide technical assistance and regulatory guidance to hazardous material users and solid and hazardous waste generators at SSC;

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- c. Maintain an inventory of hazardous materials at SSC and assist hazardous material users with reduction or substitution issues coordinating with Industrial Hygiene (IH) as appropriate;
- d. Be ultimately responsible for approving or disapproving requests for hazardous materials, per Section 9.1;
- e. Submit all required reports (including emergency notifications) to regulatory agencies related to hazardous materials, hazardous wastes, and solid wastes;
- f. Ensure that all NASA SSC employees involved with hazardous materials and hazardous wastes complete required DOT and U.S. Environmental Protection Agency (EPA) training, and that records of training are available per Sections 5.0 and 6.0;
- g. Develop response procedures to be followed in case of an emergency incident involving hazardous materials and/or hazardous wastes, refer to the *Environmental Integrated Contingency Plan* (SCWI-8500-0020-ENV);
- h. Sign NASA hazardous waste manifests, asbestos removal forms, and assume ultimate responsibility for regulatory compliance at NASA and NASA Contractor satellite accumulation areas (SAAs), the SSC Hazardous Waste CAA, and the SSC Landfill; and
- i. Ensure approval of Sustainable Acquisition Waivers per Section 9.1.

7.2 NASA, Resident Agencies, and Contractor Organizations

NASA, resident agencies, and contractor organizations shall:

- a. Update hazardous materials inventory information in the SSC Hazardous Materials Inventory System (HMIS) annually by January 10th. NASA Environmental will submit a *collective* inventory for John C. Stennis Space Center for all inventories reported in HMIS as a courtesy to resident agencies. If HMIS is not utilized, the organization shall submit the hazardous materials inventory to the State Emergency Response Commission (SERC), Local Emergency Planning Commission (LEPC), and the local/SSC Fire Department annually by March 1st (with a courtesy copy to NASA Environmental);
- b. Submit Tier 2 and Toxic Release Inventory (TRI) reports, as applicable, to the EPA and the Mississippi Department of Environmental Quality (MDEQ) by March 1 and July 1, respectively, with a courtesy copy to NASA Environmental;

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- c. Ensure that all SSC purchase requests for hazardous or potentially hazardous materials include an approved SSC Safety Data Sheet (SDS) number per Section 9.1;
- d. Ensure that each individual who handles hazardous material is trained per Section 6.0 (a) and that records of the training are available per Section 5.0;
- e. Ensure that each individual responsible for management and disposal of hazardous and/or universal waste is trained per Section 6.0 and that records of the training are available per Section 5.0;
- f. Maintain minimum bench stocks of hazardous materials;
- g. Minimize use of hazardous materials by substituting non-hazardous or less hazardous materials whenever possible;
- h. Recycle or reuse materials to the maximum extent practicable;
- i. Submit all required reports to regulatory agencies related to hazardous materials, hazardous wastes, and solid wastes, including hazardous waste-related reports if their organization has an EPA identification (ID) number, per Section 10.0, Table 1;
- j. Provide signatory authority for their hazardous waste manifests per Section 6.0;
- k. Be responsible for regulatory compliance at their hazardous waste SAAs and CAAs, if applicable; and
- l. Assist in emergency response actions related to hazardous materials and hazardous waste, as needed.

7.3 SOC Environmental Services and Industrial Hygiene

SOC Environmental Services (ES) and Industrial Hygiene (IH) personnel shall:

- a. Review requests for hazardous materials;
- b. Maintain a master file of all approved hazardous material SDSs, with the assigned SDS numbers;
- c. Be knowledgeable of all state and federal regulations dealing with hazardous material and hazardous waste management;
- d. Manage the SSC Hazardous Waste CAA per Section 10.1.2;

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- e. Provide technical assistance and regulatory guidance to hazardous material users and solid and hazardous waste generators as directed by NASA/EM;
- f. Conduct periodic inspections of all NASA and NASA Contractor SAAs in accordance with contractual requirements;
- g. Collect hazardous wastes from NASA and its contractors after receipt of a completed *Waste Removal Form* (SSC-696F) per Section 10.3.1, and transport these wastes to the SSC Hazardous Waste CAA;
- h. Ensure that all hazardous wastes entering the SSC Hazardous Waste CAA are shipped offsite for treatment or disposal within ninety (90) days of the accumulation start date; and
- i. Ensure that NASA and NASA contract personnel who handle hazardous materials receive training in accordance with the Hazard Communication Standard (29 CFR 1910.1200), and the SSC Hazard Communication Program Plan (SCWI-1800-0005). Permanent records of training shall be available per Section 5.0.

7.4 Hazardous Material Users/Requestors

Personnel who use or request the procurement of hazardous materials shall:

- a. Strive to eliminate or reduce the use of hazardous materials whenever practicable;
- b. Purchase products that meet EPA sustainable acquisition standards per Section 9.1; and
- c. Ensure that purchase requests for hazardous or potentially hazardous materials include an approved SSC SDS number per Section 9.1.

7.5 Hazardous Waste Generators

Personnel who generate hazardous waste shall:

- a. Ensure that products which may ultimately become waste are used in a manner that minimizes the waste generated;
- b. Be familiar with and abide by the SAA rules stated in Appendix A if there is an established hazardous waste SAA in their work area;

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- c. Contact SOC/ES for hazardous waste pickup in accordance with the requirements and procedures of Section 10.3.1 and Appendix A; and
- d. Contact SOC/ES for guidance before initiating any action that would generate a new hazardous waste stream, and notify SOC/ES when existing waste streams are eliminated.

8.0 APPLICABLE LAWS AND REGULATIONS

This document has been prepared in accordance with numerous federal and state laws and regulations, as identified in the following subsections, and detailed in subsequent Sections.

In accordance with Executive Orders 12088, 12856, and 13834, and the SSC *Pollution Prevention Plan* (SCWI-8500-0017-ENV), every organization at SSC must, whenever possible, minimize the use of hazardous materials and minimize the quantity of solid and hazardous wastes generated. This shall be accomplished by:

- a. Maintaining a minimal inventory of hazardous materials;
- b. Eliminating or reducing usage of hazardous materials through process changes, reengineering, and/or material substitution;
- c. Recycling or reusing materials to the maximum extent practicable; and
- d. Storing and disposing of hazardous and nonhazardous waste in a manner protective of human health and the environment.

8.1 Hazardous Materials

Several laws, regulations, and at least three federal agencies regulate hazardous material management as noted in Section 9.0.

The Emergency Planning and Community Right-to-Know Act (EPCRA), which is Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), requires facilities to provide the public with access to information about the potential chemical hazards that exist in their communities. It specifically requires that facilities report to state and local emergency planning organizations on the types and quantities of listed hazardous substances stored on their facility, and it requires facilities to immediately report releases of listed hazardous substances. The EPA administers the EPCRA program. Applicable regulations are in 40 CFR parts 302 and 350-374.

The Toxic Substances Control Act (TSCA) gives EPA the authority to place controls on chemical manufacture, distribution, use, and disposal. At SSC, TSCA applies primarily to the

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decontamination and disposal of materials and equipment that contain Polychlorinated biphenyls (PCBs) (e.g., electrical equipment or paint). It also applies to the equipment, removal, and disposal of asbestos-containing materials (ACM). Applicable regulations are in 40 CFR 761 and 763.

RCRA regulations govern the management of used oil and spent lead acid batteries for reclamation. Applicable regulations are in 40 CFR 266 and 279. The EPA and DOT jointly regulate offsite shipments of hazardous wastes/materials. The EPA regulations in 40 CFR parts 262 and 263 incorporate the DOT regulations in 49 CFR parts 171 through 179. These regulations require that shipping containers be in good condition, properly labeled and marked, and compatible with the hazardous material.

Work involving hazardous materials must comply with safety and industrial hygiene requirements set forth by the Occupational Safety and Health Administration (OSHA). Various regulations from 29 CFR 1910 apply to workers at SSC.

8.2 Hazardous Waste

The EPA regulates the management of hazardous wastes and potentially hazardous waste through the RCRA. The state of Mississippi has been given authority from the EPA to administer its hazardous waste management program, and Mississippi has adopted the federal hazardous waste regulations in full by reference. The hazardous waste regulations applicable to SSC include 40 CFR 260-268, and SSC requirements stated in Section 10.0.

8.3 Universal Waste

The EPA regulates universal waste through RCRA. Applicable federal regulations are in 40 CFR 273, and SSC requirements stated in Section 11.0.

8.4 Solid Waste

The EPA also regulates the management of solid wastes through RCRA. Applicable federal regulations are in 40 CFR 241-258, and SSC requirements stated in Section 12.0.

In addition to the federal regulations, the Mississippi Solid Waste Law establishes minimum criteria for solid waste management facilities. Applicable regulations are identified in Mississippi Administrative Code, Title 11, Part 4, *Mississippi Nonhazardous Solid Waste Management Regulations*.

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9.0 HAZARDOUS MATERIALS MANAGEMENT

A hazardous material is a substance or material that is capable of posing an unreasonable risk to health, safety, property, and/or the environment. This includes hazardous substances, hazardous waste, marring pollutants, and elevated temperature materials. The term includes those materials defined as hazardous by the DOT because they pose a risk when transported in commerce (refer to the Hazardous Materials Table at 49 CFR 172.101).

Many substances used and stored at SSC are hazardous materials, but they can be handled safely if appropriate precautions are used during their transport, use, storage, and disposal.

9.1 Procurement

Management of hazardous materials at SSC begins with personnel who use/purchase hazardous materials. These personnel should attempt to minimize the quantity of hazardous materials purchased by substituting non-hazardous or less hazardous materials whenever possible. NASA/EM and SOC/ES can assist in identifying less hazardous alternatives to many common hazardous materials.

Procurement personnel should become familiar with the federal sustainable acquisition requirements. These requirements are intended to promote the purchase and use of products made with bio-based, recovered, or recycled materials. Specifically, acquisition of products in certain categories must meet minimum standards as published in the EPA's *Recovered Materials Advisory Notice* (RMAN). A summary of the RMAN standards is provided in SCWI-8500-0017-ENV, *SSC Pollution Prevention Plan*, and SCWI-8500-0003-ENV, *Sustainable Acquisitions Plan*. Applicable products that do not meet these standards may not be purchased without a *Sustainable Acquisition Waiver* (SSC-747) approved by the SSC Environmental Officer or his/her designee.

Any request to use a hazardous material at SSC must include an SSC-approved SDS number on the Purchase Request (PR) or other request document before a Purchase Order (PO) is generated. If a valid SDS number for the requested material is not provided on the PR or other request document, the PR or request document shall be returned to the requestor, who must obtain SOC approval of the SDS and resubmit the PR.

9.2 Hazardous Material Inventory

Any organization storing or using hazardous materials in their processes is required to maintain a hazardous material inventory. Inventory information shall be updated and submitted to NASA/EM by close of business on January 10th of each year, per Section 7.2(a). SOC/ES personnel may conduct reviews of inventories as deemed necessary. The management of

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hazardous material inventories is best handled by a single point of contact in the organization responsible for obtaining the required information. Hazardous material inventory management assistance may be obtained from NASA/EM or SOC/ES.

The following information, at a minimum, must be furnished with the annual inventory report:

- a. User organization,
- b. Storage location,
- c. Organization point of contact name and phone number,
- d. SDS number,
- e. Chemical Abstracts Service registry number,
- f. Product name,
- g. Hazardous components and percentage of each,
- h. Type of container and weight and/or volume of contents,
- i. Number of containers in stock,
- j. Estimated monthly use, and
- k. Estimated usage for the reporting year.

9.3 Bench Stock and Storage

Several best-management practices shall be observed in hazardous material storage areas, including bench stock storage areas, as follows.

- a. Hazardous materials shall be isolated from general bench stock and populated work areas. Follow storage requirements as provided on the SDS.
- b. Minimize the quantity of hazardous material on-hand. Purchase only quantities that will be used in a 30-day period. Do not stockpile.
- c. Limit access to hazardous materials. Do not allow untrained personnel to handle these materials per Section 6.0.

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- d. Segregate incompatible chemicals. Refer to the SDS for the hazardous material compatibility and segregation information.
- e. Containers used to dispense flammable liquids must be grounded and a static wire connected to the receiving container.
- f. Containers of liquids with capacity equal to or greater than 30 gallons shall be stored on spill control pallets unless engineering controls are used to ensure that spilled materials would be contained. Spill control pallets in outside locations must be covered to prevent/minimize the potential for water to accumulate in the pallet.
- g. Operable communication equipment must be available in or near the area.
- h. An operable fire extinguisher (appropriate for the stored material) must be located in the area.
- i. Hazardous material signs identifying the hazards present must be posted at each storage area. Signs must meet requirements of 29 CFR 1910.145.
- j. A safety shower and eye wash station must be located within the area and readily accessible.
- k. Spill cleanup materials sufficient to contain/clean up small spills shall be available. All spills must be reported immediately to the SSC Security Dispatcher by calling 911 (or if on a cell phone, call 228-688-3636).
- 1. Unused bulk (30 gallons or greater per container) hazardous materials that are no longer needed may be re-issued by contacting SOC/ES. These materials must be within their shelf life; otherwise they will be considered waste and handled in accordance with Sections 10.0 and 12.0. If there are questions about the hazards associated with a given material, the organization should contact SOC/ES.

9.4 Personnel Training and Safety

9.4.1 Hazard Communication

The OSHA Hazard Communication Standard (29 CFR 1910.1200) requires that persons exposed to hazardous materials be trained per Section 6.0.

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Per 29 CFR 1910.1200, individuals working with hazardous materials must receive initial training and additional specific training when the chemical hazards change. SOC/ES is available on request to assist with such training; but, it is the responsibility of each resident agency, contractor, or sub-contractor at SSC to ensure that their employees have all applicable training and that training records are complete, properly filed, and maintained per regulatory requirements, as stated in Sections 5.0 and 6.0.

9.4.2 Safety Data Sheet (SDS) and Personal Protective Equipment

The SDS provided by the material manufacturer or distributor provides basic information about the hazards associated with a given material. Supervisors for each work area and/or storage area must maintain inventory chemical list of the hazardous materials used in their area and must ensure that personnel using those hazardous materials have access to those SDSs in their areas. Workers should refer to this information to understand the potential hazards of a material and the appropriate personal protective equipment to use when working with the material.

10.0 HAZARDOUS WASTE MANAGEMENT

The RCRA defines hazardous waste as a solid waste (a discarded, abandoned, or otherwise inherently waste-like material per Section 12.0) that either exhibits the characteristics of hazardous waste (as defined in 40 CFR 261 Subpart C) or is a listed hazardous waste (as defined in 40 CFR 261 Subpart D). It is important to realize that the RCRA definition of a solid waste can include materials that are liquid, solid, or gas.

Several of the solid and liquid wastes generated at SSC meet the definition of hazardous waste. These materials must be collected and stored in accordance with stringent regulatory requirements. All hazardous wastes generated at SSC must be shipped to a permitted offsite facility for treatment, storage, or disposal.

Various agencies and contractors at SSC generate hazardous waste. NASA SSC maintains large quantity generator (LQG) status under RCRA Subtitle C. Ten agencies at SSC have small quantity generator (SQG) status, six of which are classified as very small quantity generators (VSQG). The SQGs include the U.S. Government Publishing Office (GPO); the Naval Oceanographic Office (NAVO); Special Boat Team-22 (SBT-22); the Naval Research Laboratory (NRL); the National Oceanographic and Atmospheric Administration's National Data Buoy Center (NOAA/NDBC); Aerojet Rocketdyne; the University of Southern Mississippi (USM); the U.S. Geologic Survey (USGS); the Naval Small Craft Instruction and Technical Training School (NAVSCIATTS); and Rolls Royce.

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Table 1 summarizes the current status for each hazardous waste generator at SSC. Hazardous wastes of one generator may not be co-mingled with those of another generator. Each generator must obtain its own EPA ID number through the state of Mississippi, and accumulate, store, and dispose of its hazardous wastes separately.

TABLE 1. RCRA STATUS FOR SSC NASA AND RESIDENT AGENCIES

Generator	EPA ID Number	RCRA Status
NASA SSC	MS2800090001	LQG
U.S. Government Publishing Office (GPO)	MSCESQG00000	VSQG
Naval Oceanographic Office (NAVO)	MS6171624640	SQG
Special Boat Team-22 (SBT-22)	MSR000004929	SQG
Naval Research Laboratory (NRL)	MS5171624641	VSQG
NAVSCIATTS	MSR000004929	SQG
NOAA National Data Buoy Center (NDBC)	MS2130500000	VSQG
Aerojet Rocketdyne	MSR000005579	VSQG
U.S. Geological Survey (USGS)	MS6801200001	VSQG
USM Center for Marine Sciences	MS0000444745	SQG
Rolls Royce	MSR000104414	VSQG

10.1 Storing Hazardous Waste and Potentially Hazardous Waste

10.1.1 Satellite Accumulation Areas (SAAs)

Some of the hazardous wastes at SSC are generated regularly as part of recurring processes. Such wastes may be accumulated *near the point of generation* in an approved satellite accumulation area (SAA), per the requirements of 40 CFR 262.15. All SAAs must be pre-approved by NASA/EM. Organizations shall assign a manager and one alternate manager for each SAA in their work area, ensure they are trained per Section 6.0, and notify SOC/ES immediately if the SAA manager or alternate is changed. SAA managers and alternates are responsible for maintaining their SAA according to the rules in Appendix A.

The containers in each SAA must be compatible with the waste, in good condition, properly labeled, and kept closed except when adding waste. Hazardous wastes may be accumulated in SAAs indefinitely as long as the quantity is less than 55 gallons (or one (1) quart of acute hazardous waste). When the quantity limit is reached, the SAA manager must mark the date on the container(s) and complete the waste removal process in accordance with Section 10.3.1.

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10.1.2 SSC Hazardous Waste Centralized Accumulation Area (CAA) – B2210

The SSC Hazardous Waste CAA is on the west side of Endeavor Boulevard, between Road "H" and Road "J". This building was designed and constructed for short-term (less than ninety [90] days) hazardous waste storage. The outer walls, divided at chest level, consist of sheet metal below and chain link fencing above. Entries are at the north and south ends of the building. The south entrance gate is sufficiently large to permit vehicle access. Containment curbing is in place around the entire floor except at the south entrance gate; however, the floor slopes down toward the north end. The valve in the drain at the north end is closed and locked, to contain spills. An enclosed office, equipped with a sink, is located in the southwest corner of the building. Other features include an emergency eye wash/shower station (connected to the sink), emergency telephone, spill control equipment, 500-gallon hazardous waste storage tank, two used oil tanks, and storage cabinets.

Warning signs at the entrance identify the area as a hazardous waste storage area, prohibit smoking, and list phone extensions for appropriate contact personnel if entry is required. The building remains locked at all times, except when authorized personnel are present. Those with access authority include NASA Environmental Management personnel, SOC Environmental Services personnel, SSC Security personnel, and SSC Fire Department personnel.

The length of time that hazardous wastes may be stored in a CAA depends on the classification of the generator. NASA is an LQG and hazardous wastes may be stored for a period of ninety (90) days or less. There is no limit to the quantity of wastes that may be stored. All hazardous wastes in the SSC Hazardous Waste CAA shall be stored for compatibility in a designated area. All hazardous wastes brought into the SSC Hazardous Waste CAA must be recorded on the *90-Day Hazardous Waste Accumulation Point Waste Log* (SSC-696N). These wastes must be managed in accordance with 40 CFR 262.17(a), which includes the following, at a minimum.

- a. Hazardous waste containers must be DOT approved and labeled with the words "Hazardous Waste," the accumulation start date, and a brief description of the contents. Hazardous materials in volumes of 26 gallons or more must be packed in DOT Level I containers.
- b. Empty containers must be labeled or otherwise identified as "Empty."
- c. Hazardous waste containers must be free from severe rusting and/or structural defects.

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- d. Hazardous waste containers must be kept closed except when adding or removing wastes.
- e. Hazardous waste containers must be compatible with the waste they contain.
- f. Containers of incompatible wastes should be segregated to the greatest extent practicable.
- g. Hazardous waste containers must be stored on spill control pallets.
- h. Containers used to store flammable materials must comply with the OSHA standards and must be properly grounded to prevent sparks caused by static electricity.
- i. Wastes contaminated with Polychlorinated biphenyls at a concentration greater than 50 parts per million must be managed in compliance with 40 CFR 761. RCRA regulations require hazardous waste CAAs to be inspected at least once every seven (7) calendar days. SOC/ES is responsible for these inspections. The 90-Day Hazardous Waste Accumulation Point Inspection Sheet (SSC-696J) shall be used during the inspection, signed by the inspector, and maintained by SOC/ES as a record for at least five (5) years in accordance with Section 5.0.

Persons who work in the SSC Hazardous Waste CAA must complete training per 40 CFR 265.17(a)(7), within six (6) months of assignment to such duties. Training documentation, including job titles, job descriptions, training descriptions, and training records for current and former employees for the previous three (3) years, shall be kept in the SSC Hazardous Waste CAA per Section 6.0.

10.2 Offsite Treatment or Disposal

All hazardous wastes entering the SSC Hazardous Waste CAA (B2210) must be shipped offsite for treatment or disposal within ninety (90) days of the start date of accumulation. SOC/ES is responsible for keeping track of accumulation times for wastes in the CAA, and for scheduling shipments to NASA-approved treatment, storage, and disposal (TSD) facilities. Resident agencies may make arrangements with SOC/ES to have their accumulated wastes included on the shipments. However, wastes from each generator shall be treated as separate shipments, packed separately and appropriately labeled to identify contents, waste codes, generator's name, and EPA ID and manifest numbers.

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10.3 Collecting Hazardous Waste and Potentially Hazardous Waste

10.3.1 NASA and NASA Contractors

NASA and NASA contractors who generate hazardous waste or potentially hazardous waste may store it temporarily in an SAA per Section 10.1.1, or they must immediately arrange for its disposal. In either case, the process for removal of hazardous waste is as follows.

The waste generator shall submit a completed *Waste Removal Form* (SSC-696F) to SOC/ES. Constituents of the waste shall be listed on the form to the best of the generator's knowledge, and SDSs, lab analytical data, or process knowledge information shall be provided. The completed Form SSC-696F shall be e-mailed (preferred), faxed (228-688-1326), or hand-delivered (with copy) to SOC/ES for hazardous waste pickup and storage in the SSC Hazardous Waste CAA within three (3) calendar days of receipt of the completed Form SSC-696F if the regulatory limit of 55 gallons of hazardous waste or one (1) quart of acutely hazardous waste has been reached.

The emailed, faxed, or hand-delivered Form SSC-696F shall be signed by the SOC Environmental Specialist who completes the pickup. The signed Form SSC-696F shall be maintained by SOC/ES as a record.

10.3.2 Resident Agencies

Resident agencies with their own EPA ID number are responsible for maintaining their own hazardous waste or potentially hazardous waste CAAs and SAAs, and for moving hazardous wastes from their SAAs to their CAA, for disposal per Sections 10.0, 10.1.1 and 10.1.2. For potentially hazardous waste, the generator must determine whether or not the waste is a hazardous waste as defined by RCRA, 40 CFR 273. SOC/ES may be contacted to assist with this determination. If the waste is determined to be hazardous waste, it must be stored in the designated hazardous waste CAA, SAA, or staging area until disposal arrangements are made. If waste is determined to be non-hazardous, or recyclable, the generator should contact SOC/ES, who will either pick up and dispose of the waste, or advise the generator of disposal options.

11.0 UNIVERSAL WASTE MANAGEMENT

Universal wastes as listed below are regulated by federal and state regulatory agencies. Such wastes are to be separated from landfill wastes per Section 12.1 for proper disposition and/or

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recycling per Section 12.3, and may be accumulated in a designated CAA for up to one (1) year. NASA and its onsite contractors shall use a CAA in B9114, and arrange for collection/disposal with SOC ES. Resident agencies must provide their own CAAs and arrange for collection and disposal per Section 10.3.2.

All employees who handle or have responsibility for managing universal waste must be informed of procedures for appropriate handling and disposal criteria for the type (s) of universal waste at the facility. Upon request, SOC ES will provide training to appropriate personnel concerning universal waste handling and emergency procedures per Section 6.0.

All releases and residues of universal waste must be contained immediately. Care shall be taken when disposing of such materials to ensure that the waste does not go to the SSC landfill.

Examples of universal waste include:

- a. Electric lamps, as defined in 40 CFR 273.5, including, but not limited to, fluorescent light tubes, metal halide, mercury, neon, high-intensity discharge, and high-pressure sodium,
- b. Batteries, as defined in 40 CFR 273.2,
- c. Pesticides, as defined in 40 CFR 273.3, and
- d. Mercury containing equipment, as defined in 40 CFR 273.4.

12.0 SOLID WASTE MANAGEMENT

According to RCRA regulations, solid waste is defined as a discarded, abandoned, or otherwise inherently waste-like material that has not been specifically excluded from regulation. Also, many materials that are collected for recycling are considered solid waste. It is important to realize that the RCRA definition of solid waste may include solids, liquids, semi-solids, or contained gaseous materials.

Non-hazardous solid wastes generated at SSC (except those segregated for recycling) are collected in dumpster-type containers located throughout SSC. Containers are emptied a minimum of once a week. Collected wastes are weighed and transported to the onsite Class A sanitary landfill for disposal.

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12.1 Landfill Operations

NASA owns and operates a Class A landfill as authorized by permit number SW02401B0376. This landfill is located near the northwest corner of SSC. It can be reached by taking Gravel Pit Road west from Trent Lott Parkway, and turning south on Endeavor Boulevard.

A six-foot chain link fence surrounds the perimeter of the landfill site. There are two gates, at the north and south ends of the facility. During normal operations, only the north gate is open. A landfill attendant is on duty each working day and the office is located in Building 7020, just inside the north gate. The attendant is responsible for controlling access to the site. The gates are closed and locked when the landfill is not open to receive waste and at the end of each working day. Facility operations are the responsibility of the SOC Facility Maintenance and Operations Department. All operations must be in accordance with Rule 1.4.B of the *Mississippi Department of Environmental Quality Nonhazardous Solid Waste Management Regulations* (11 Miss. Admin. Code Pt. 4, Ch.1).

Landfill users must check in with the landfill attendant and provide required waste information (as specified in 11 Miss. Admin. Code Pt. 4) on the SSC Landfill Operations Log (SOC Form 504), <u>prior to</u> offloading. Wastes may only be off-loaded in areas as directed by the landfill attendant.

The landfill attendant is authorized to prohibit any user from off-loading if there is reason to believe or to suspect that prohibited wastes may be included in a given load. The following wastes are specifically prohibited from disposal in the landfill:

- a. Hazardous waste as defined by RCRA,
- b. Polychlorinated biphenyls,
- c. Asbestos-containing materials, unless they have been properly containerized,
- d. Infectious waste, including medical waste per Section 12.4,
- e. Tires, scrap metals, and other recyclable items per Section 12.3,
- f. Household waste generated offsite,
- g. Bulk or non-containerized liquid wastes (unless the container is small and of the type normally found in household waste), and
- h. Rubbish suitable for disposal in the Class II Rubbish Disposal Site per Section 12.2.

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12.2 Rubbish Sites

SSC maintains four (4) permitted Class II Rubbish Disposal Sites. The main rubbish site, located adjacent to and just south of the Class A landfill, is permitted for the disposal of asphalt, stone, brick, mortar, concrete, and natural vegetative materials (tree limbs, stumps, and leaves). These items are staged for recycling when possible. All other wood products must be disposed of in the solid waste landfill. This rubbish site is managed as part of the landfill and the landfill attendant controls access. All users must check in with the landfill attendant and provide required waste information on the SSC Landfill Operations Log (SOC Form 504) prior to offloading. Rubbish may only be off-loaded in areas as directed by the landfill attendant.

Adjacent to each of the three (3) SSC wastewater treatment lagoons is a rubbish site permitted only for disposal of vegetation removed from the lagoons. Removal is dependent on growth rates but usually occurs twice each year.

The SOC Facility Maintenance and Operations Department is responsible for operation of all four (4) SSC rubbish sites. All operations at SSC rubbish sites must comply with Rule 1.6 of the *Mississippi Department of Environmental Quality Nonhazardous Solid Waste Management Regulations*, and the State of Mississippi Solid Waste Management General Permit (Permit # SWGP-R2).

The following are specifically prohibited from disposal in an SSC Rubbish Site:

- a. Any waste identified in ACT6.L-1 of the general permit which has been contaminated by a pollutant, such as food or chemical, unless it can be demonstrated to the satisfaction of MDEQ that such waste has no adverse effect on the environment;
- b. Household garbage and other food and drink waste;
- c. Liquids, sludges, and contaminated soils;
- d. Paint, paint buckets, oil containers, and chemical containers;
- e. Engines, motors, whole tires, and all types of batteries;
- f. Toxic and hazardous waste;
- g. Regulated asbestos and asbestos-containing material originating from a facility, as defined by the National Emission Standards for Hazardous Air Pollutants (40 CFR 61, Subpart M);
- h. Medical waste(s);

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- i. Bulk fabric and paper loads, refrigerators, air conditioners, cut or shredded tires, and any metal, glass, plastic or paper container, unless specifically approved by MDEQ. MDEQ shall consider the characteristics of the waste, the operating plan of the site, and other site specific conditions in determining the acceptability of any such waste;
- i. Electronic wastes; and
- k. Other wastes which are specifically determined by MDEQ to have an adverse effect on the environment

12.3 Recycling

Several solid waste and hazardous waste streams generated at SSC are currently recycled. Refer to the SSC Recycling Program in SCWI-8500-0017-ENV, SSC Pollution Prevention Plan.

12.4 Medical Wastes

Medical wastes are routinely generated in the SSC Medical Clinic. Medical waste may be defined as any waste generated in the course of administering medical care. Of particular concern are potentially infectious materials and materials that have been contaminated with blood, body fluids, or other infectious materials. Examples include:

- a. Pathological wastes (tissues, body parts),
- b. Human blood and blood products,
- c. Used sharps (hypodermic needles, syringes, scalpels, etc.), and
- d. Potentially infectious wastes (containing pathogenic organisms with sufficient virulence and in sufficient concentration to be capable of causing disease).

These and other wastes are managed (collected, labeled, stored and disposed of) in accordance with S3-5400-W7, Medical Waste Management.

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APPENDIX A

RULES FOR SSC SATELITTE ACCUMULATION AREAS (SAAs) AND GENERATORS OF HAZARDOUS WASTE

A.1 Container Location

Hazardous waste satellite accumulation area (SAA) containers must be located at or near the point of waste generation. Each SAA must be "under the control of the operator of the process generating the waste" [40 CFR 262.15]in a segregated area that is clearly marked with a placard that identifies the area as being an SAA and that clearly shows the names and phone extensions of the SAA Manager and alternate manager. SAA manager and alternate manager training records must be posted or readily available.

A.2 Container Markings

Containers of hazardous waste must be marked with the words "Hazardous Waste" and the name of the hazardous contents. Containers of potentially hazardous waste must be marked with the name of the contents.

A.3 Container Management

- a. Containers must be in good condition.
- b. Containers must be compatible with the waste stream (if in doubt, contact SOC Environmental Services).
- c. Containers must be kept closed except when adding or removing wastes.
- d. Containers of liquids must be kept on a spill pallet that is large enough to contain the total contents of the largest container, or 10% of all the containers on the pallet, whichever is greater.
- e. If kept outside, containers and spill pallets must be covered to prevent/minimize the accumulation of rain water in the spill pallet.
- f. If the hazardous waste is a flammable liquid (flash point below 140° F), the container must be grounded and bonding wires must be used when transferring wastes to or from the container.

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A.4 Time Limits

There is no time limit on accumulation in an SAA until the maximum quantity has been reached; however, if an SAA becomes 'full' per Section A.5, or when hazardous waste needs immediate pickup, then Form SSC-696F must be immediately processed per Section 10.3.1. Once the quantity limit has been reached, the container(s) must be moved within three (3) calendar days.

A.5 Quantity Limits:

The maximum quantity of hazardous waste that may be kept in any single SAA is 55 gallons. This quantity includes all waste streams accumulated at that location.

A.6 What to Do When an SAA is "Full" - (for NASA and NASA Contractors only)

When the maximum quantity is reached (Section A.5), mark the date on the container(s), and <u>immediately</u> contact SOC Environmental Services (see list of contacts below) and submit the *Waste Removal Form* (SSC-696F) for waste pick-up, as specified in Section 10.3.1.

Contact	Extension
Halela Nguyen	8-3978
Chandler Whalen	8-1503
Jane Kennedy	8-1257

In the Event of an Emergency:

In the event of a spill, personnel contamination, or other emergency, call **911 (or, if on a cell phone, call 228-688-3636)** and initiate actions per SCWI-8500-0020-ENV, *Environmental Integrated Contingency Plan and Spill Prevention, Control and Countermeasures (SPCC) Plan.*

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APPENDIX B ACRONYMS AND ABBREVIATIONS

ACM Asbestos Containing Materials

CAA Centralized Accumulation Area
CAR Corrective Action Report

CERCLA Comprehensive Environmental Response, Compensation & Liability Act

CerTrak Certification Tracking Database CFR Code of Federal Regulations

DOT Department of Transportation

ECL Environmental Chemical Lab - EPA
EM Environmental Management - NASA

ENV Environmental

EPA U.S. Environmental Protection Agency

EO Executive Order

EPCRA Emergency Planning and Community Right-To-Know Act

ES Environmental Services - SOC

F Fahrenheit

GPO Government Printing Office

HMIS Hazardous Materials Inventory System

ID Identification

IH Industrial Hygiene

LEPC Local Emergency Planning Commission

LQG Large Quantity Generator

MDEQ Mississippi Department of Environmental Quality

NASA National Aeronautics and Space Administration

NAVSCIATTS Naval Small Craft Instruction and Technical Training School

NAVO Naval Oceanographic Office NDBC National Data Buoy Center

NOAA National Oceanographic and Atmospheric Administration

NPR NASA Procedural Requirements
NRL Naval Research Laboratory

OSHA Occupational Safety and Health Administration

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Responsible Office: RA02/ Environmental Management - Center Operations Directorate

SUBJECT: Hazardous Material, Hazardous Waste, and Solid Waste Plan

ACRONYMS AND ABBREVIATIONS

(continued)

PCB Polychlorinated Biphenyls

PO Purchase Order PR Purchase Request

RCRA Resource Conservation and Recovery Act RMAN Recovered Materials Advisory Notice

S3 Syncom Space Services
SAA Satellite Accumulation Area

SARA Superfund Amendments and Reauthorization Act of 1986

SATERN System for Administration, Training, and Educational Resources for

NASA

SBT Special Boat Team

SCWI Stennis Common Work Instruction

SDS Safety Data Sheet

SERC State Emergency Response Commission

SOC Stennis Operating Contractor

SPCC Spill Prevention Control and Countermeasures

SPR Stennis Procedural Requirement SQG Small Quantity Generator SSC Stennis Space Center

TRI Toxic Release Inventory
TSCA Toxic Substance Control Act
TSD Treatment, Storage and Disposal

USC United States Code

USGS United States Geological Survey USM University of Southern Mississippi

UST Underground Storage Tank
UWM Universal Waste Management